

Title (en)

COMPUTING METHODS AND APPARATUSES WITH GRAPHICS AND SYSTEM MEMORY CONFLICT CHECK

Title (de)

BERECHNUNGSVERFAHREN UND VORRICHTUNGEN MIT GRAFIK UND SYSTEMSPEICHERKONFLIKTPRÜFUNG

Title (fr)

PROCÉDÉS ET APPAREILS INFORMATIQUES À CONTRÔLE DE CONFLITS DE MÉMOIRE DE GRAPHIQUES ET DE SYSTÈME

Publication

EP 3274818 A1 20180131 (EN)

Application

EP 15885874 A 20150326

Priority

CN 2015075116 W 20150326

Abstract (en)

[origin: WO2016149935A1] An apparatus may include a graphics processing unit (GPU) and a hypervisor. The hypervisor may include a command parser to parse graphics memory addresses associated with a workload of a virtual machine of the apparatus, and generate a first shadow global graphics translation table (SGGTT) for translating the graphics memory addresses. The hypervisor may further include a GPU scheduler to check conflict between the first SGGTT and a second SGGTT containing graphics memory addresses used by working sets being-executed or to-be-executed by the render engines of the GPU, and schedule the workload of the virtual machine to a render engine when there is no conflict between the first SGGTT and the second SGGTT. Other embodiments may be described and/or claimed.

IPC 8 full level

G06F 9/44 (2018.01)

CPC (source: EP US)

G06F 8/427 (2013.01 - EP US); **G06F 8/44** (2013.01 - EP US); **G06F 9/45512** (2013.01 - US); **G06F 9/45558** (2013.01 - EP US); **G06F 9/4843** (2013.01 - EP US); **G06F 9/4881** (2013.01 - US); **G06F 12/1009** (2013.01 - US); **G06F 12/1027** (2013.01 - US); **G06T 1/20** (2013.01 - US); **G06T 1/60** (2013.01 - US); **G06T 15/005** (2013.01 - US); **G06F 2009/45583** (2013.01 - EP US); **G06F 2212/302** (2013.01 - US); **G06F 2212/657** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2016149935 A1 20160929; CN 107250980 A 20171013; CN 107250980 B 20210209; EP 3274818 A1 20180131; EP 3274818 A4 20181205; EP 3274818 B1 20210127; US 10242422 B2 20190326; US 2018122039 A1 20180503

DOCDB simple family (application)

CN 2015075116 W 20150326; CN 201580076870 A 20150326; EP 15885874 A 20150326; US 201515553143 A 20150326